

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for simulating wearing of a knit garment on a human model, the knit garment being a virtual knit garment and having a plurality of connected tubular parts, the human model being a three-dimensional human model and comprising a plurality of polygons, the method comprising the steps of:

providing the human model with a plurality of axes;

expanding the connected parts of the knit garment to form connected tubular parts of the knit garment;

matching each of the connected tubular parts of the knit garment with any of the plurality of axes, while keeping the parts tubular, so as to make the each of the connected tubular parts surround said any of the plurality of axes and temporarily positioning the knit garment with respect to the human model; and

shrinking/~~expanding~~ the temporarily positioned knit garment toward the axis matched with each of the connected tubular parts of the knit garment in a peripheral direction such that for each one of the connected tubular parts, at least one of (a) a portion of said one connected tubular part contacts said human model, and (b) a number of stitches per length of said one connected tubular part reaches a predetermined value, so that when the knit garment is worn on the human model each of the connected tubular parts appears outside the human model.

2. (Currently Amended) The method for simulating wearing of claim 1, wherein:
the human model comprises at least a torso and both arms, along with an axis of the torso, and axes of the right and left arms;

the plurality of connected tubular parts of the virtual knit garment comprises at least a body and sleeves, each of the connected tubular parts is matched with any of the axes of the human model, and the temporary positioning is performed so that the axis matched with each of the connected tubular parts passes through the inside of each of the connected tubular parts; and

both of the sleeves of the virtual garment are shrunk/~~expanded~~ such that upper parts of the both sleeves contact with upper parts of the arms of the human model and spaces are

provided at lower parts of the both sleeves with respect to the upper parts of the arms of the human model.

3. (Original) The method for simulating wearing of claim 2, wherein after wearing the virtual knit garment on the human model, each stitch of the virtual knit garment is rearranged along a course direction and a wale direction of the virtual knit garment, whereby distortions between parts having different matching axes on the virtual knit garment are removed.

4. (Original) The method for simulating wearing of claim 1, wherein after wearing the knit garment, each of stitches of the knit garment is moved close to a mean position of surrounding stitches, whereby positions of the stitches of the knit garment are smoothed, and the smoothing is repeatedly performed.

5. (Currently Amended) A device for simulating wearing of a knit garment on a human model, the knit garment being a virtual knit garment and having a plurality of connected tubular parts, the human model being a three-dimensional human model and comprising a plurality of polygons, the device comprising:

storage means for storing positions of a plurality of axes provided on the human model;
expanding means for expanding the connected parts of the knit garment to form connected tubular parts of the knit garment;

matching means for matching each of the connected tubular parts of the knit garment with any of the plurality of axes, while keeping the parts tubular, so as to make each of the connected tubular parts surround said any of the plurality of axes;

temporary arranging means for temporarily arranging each of the connected tubular parts, within a three-dimensional space, with respect to the matching axis; and

wearing means for shrinking/~~expanding~~ each of the connected tubular parts in a peripheral direction toward the matching axis such that for each one of the connected tubular parts, at least one of (a) a portion of said one connected tubular part contacts said human model, and (b) a number of stitches per length of said one connected tubular part reaches a predetermined value, so that each of the connected tubular parts appears outside the human model,

wherein the knit garment which is temporarily positioned with respect to the axes is shrunk/~~expanded~~ toward the axis matched with each of the connected tubular parts and worn on the human model.

6. (Currently Amended) The device for simulating wearing of claim 5, wherein the virtual knit garment comprises a body and both sleeves, the human model comprises a torso, both arms, and axes of the torso and the both arms, and, by way of the wearing means, the both sleeves of the virtual garment are shrunk/~~expanded~~ such that upper parts of the both sleeves contact with upper parts of the arms of the human model and spaces are provided at lower parts of the both sleeves with respect to the lower parts of the arms of the human model.

7. (Original) The device for simulating wearing of claim 6, further comprising correction means for, after wearing the virtual knit garment on the human model, rearranging stitches along a course direction and a wale direction of the virtual knit garment to remove distortions between parts having different matching axes on the virtual knit garment.

8. (Original) The device for simulating wearing of claim 5, further comprising:
smoothing means for smoothing positions of stitches of the knit garment by moving each of the stitches of the knit garment close to a mean position of surrounding stitches after wearing the knit garment on the human model; and

repeating means for causing the smoothing means to repeatedly perform the smoothing of the positions of the stitches.

9. (Currently Amended) A computer program product, comprising a computer readable medium having a computer readable program code embodied therein, said computer readable program code adapted to be executed by processor to implement a method for simulating wearing of a knit garment on a human model, the knit garment being a virtual knit garment and having a plurality of connected ~~tubular~~ parts, the human model being a three-dimensional human model and comprising a plurality of polygons, the method comprising:
storing positions of a plurality of axes provided on the human model;

expanding the connected parts of the knit garment to form connected tubular parts of the knit garment;

matching each of the connected tubular parts of the knit garment with any of the plurality of axes, while keeping the parts tubular, so as to make each of the connected tubular parts surround said any of the plurality of axes;

temporarily arranging each of the connected tubular parts, within a three-dimensional space, with respect to the matching axis; and

shrinking/~~expanding~~ each of the connected tubular parts in a peripheral direction toward the matching axis such that for each one of the connected tubular parts, at least one of (a) a portion of said one connected tubular part contacts said human model, and (b) a number of stitches per length of said one connected tubular part reaches a predetermined value, so that each of the connected tubular parts appears outside the human model,

wherein the knit garment which is temporarily positioned with respect to the axes is shrunk/~~expanded~~ toward the axis matched with each of the connected tubular parts and worn on the human model.

10. (Currently Amended) The computer program product of claim 9, wherein the virtual knit garment comprises a body and both sleeves, the human model comprises a torso, both arms, and axes of the torso and the both arms, and by way of the wearing command both sleeves of the virtual garment are shrunk/~~expanded~~ such that upper parts of the both sleeves contact with upper parts of the arms of the human model and spaces are provided at lower parts of the both sleeves with respect to the lower parts of the arms of the human model.

11. (Currently Amended) The computer program product of claim 10, wherein the method for simulating wearing of a knit garment on a human model further comprises a [[a]]step of, after wearing the virtual knit garment on the human model, rearranging stitches along a course direction and a wale direction of the virtual knit garment to remove distortions between parts having different matching axes on the virtual knit garment.

12. (Previously presented) The computer program product of claim 9, wherein the method for simulating wearing of a knit garment on a human model further comprises:

smoothing positions of stitches of the knit garment by moving each of the stitches of the knit garment close to a mean position of surrounding stitches after wearing the knit garment on the human model; and

repeatedly executing the smoothing command.